

Friday May 21, 2021 6pm
MEETING IS VIRTUAL !

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*The COVID-19 pandemic required the club to cancel all in-person meetings for the duration of the outbreak. In response, the Club began meeting electronically, using the **zoom.us** system. Invitations to each publicly available meeting will be sent out via our groups.io email reflector listed on page 2, making it even more important that you join this email group. See page 16 for details on Zoom.*



A VHF Winlink System - from Design Through Equipment Selection, Installation and System Testing

In Walnut Creek, our 300+ Community Emergency Response Teams (CERT) team members receive basic training to safely respond to the needs of their neighborhoods following disaster, and to serve as the eyes and ears of the city's Emergency Operations Center and first responders. Additionally, our CERTs have helped police search for missing minors, run welfare checks during planned power shutdowns, and distribute materials for safety alerts.

Amateur radio communications and our 100+ licensed CERT hams play a critical role interconnecting Walnut Creek CERT forces both within their areas and to the CERT Emergency Radio Operator (CERO) radio room serving the Emergency Operations Center in City Hall.

Tonight's presentation covers a technology and process upgrade on the critical link between our CERT command posts and the EOC, changing from an ineffective paper and people-intensive manual process to electronic messaging using amateur radio. We'll briefly explain the current manual situation and the many alternatives we evaluated before choosing a somewhat atypical configuration of Winlink Express, VARA FM Wide, RMS Relay and RMS Packet over simplex VHF.

John Trinterud, K9ONR, was first licensed in 2012 as KJ6PAP and has over 50 years experience in telecommunications and computer networking.

*The meeting will be held virtually, via our Zoom videoconferencing system. The meeting access ID and password will be distributed via groups.io email announcement. The meeting will also be shown on the club digital amateur television repeater, which is live streamed at: <http://w6cxatv.mdarc.org/> and also live streamed on YouTube on the **Media MDARC** channel.*



Dirk Bridgedale, KM6UXE
Phillip Cantu, KN6ODC
Bill Goldsby, KI6HCA
David Kobetz, KM6LLL
Amir Larian, N6ADL
Dave Lichtenhan, WW6DCL
Mark McAlister, KN6IPD
Michael Pohl, K6MRP
Anthony W. Stanton, AC6GM

If you hear these new members on the air, please welcome them to our club.

— Jan Kulisek, KM6NFC



When you purchase at Amazon dot com smile, a portion of your purchase is donated to our club.

Go to:

<https://smile.amazon.com/ch/23-7072059>

ALL MEMBERS ARE INVITED TO JOIN THE FREE CLUB E-MAIL GROUP AT:

<https://groups.io/g/MDARC>

Mount Diablo Amateur Radio Club W6CX
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The Carrier is a monthly publication of the Mount Diablo Amateur Radio Club (MDARC). It is the policy of the editor to publish all material submitted by the membership provided such material is in good taste, relevant to amateur radio and of interest to MDARC members, and provided space is available.

President - Larry Bradley, KK6QPE
Vice President - Jan Kulisek, KM6NFC
Secretary – Brian Lotter, KM6NGS
Treasurer - Cathi Walton, K2CJW
Emergency Coordinator - Ron Bunch, W4FEK

Directors At Large

Trevor Hall, WA6JAU Cal Vasquez, K6VT
Eric Ferguson, KA6USJ Mike Warren, W6MEW

Membership Chair – Jan Kulisek, KM6NFC
mdarcmembership@mdarc.org

PACIFICON 2021

Chair: Julie Mah, WJ8MAH
Registration: Debbie Deeble, KN6DOM
Treasurer: Jim Siemons, W6LK
Secretary: Jan Kulisek, KM6NFC

COMMITTEE CHAIRS AND COORDINATORS

Annual Auction - Jim Siemons, W6LK
Communications Trailer - Mike Warren, W6MEW
Communications Van MDARC-1 - Jim Tittle, K6SOE
Digital Media - Mike Patterson, N6JGA
Education & Training - John Primus, AF6RJ
Field Day - Larry Loomer, KI6LNB
Good & Welfare - Diana Sage, KA6TZU
Holiday Dinner - Misa Siemons, KJ6BUE
License Testing - Larry Loomer, KI6LNB
Outreach - Dick Wade, WM6G
Public Service - Klaus Berkner, K6KHB
Radio Equipment Lending - Cal Vasquez, K6VT
Refreshments - Elizabeth Styles, KG6HLV
Repeater Trustee W6LGW - Dick Brown, KT6X
Repeater Trustee W6CX - Jim Tittle, K6SOE
Scholarship - Janice Fujii, KG6VTD
Technical Committee - Jim Siemons, W6LK

***The Carrier* Newsletter**

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President's Message

May 2021

MDARC Family,

It is hard to believe that we are already in May. I don't know about your yard, but our backyard is a riot of color from the California poppies and the occasional sweet pea provides a purple accent from the sea of orange.

Taking a slight side trip and speaking of California poppies, this picture is of the one of the first ever recorded fire poppies (*Papaver californicum*) found in the Morgan Territory/Round Valley/Los Vaqueros area and the only recorded fire poppy sighting within the entire **400,000-acre Lightning Complex Fire** footprint. [information attributed to Save Mount Diablo; see [Rare Fire Poppy Discovered East of Mount Diablo in Aftermath of SCU Fire Complex » Save Mount Diablo](#) for more information.]



Sure, I know this sounds like a blurb more appropriate for Flora, a publication by the California Native Plant Society, but there is a connection...however slight. I can attest that when MDARC provided radio communications for the Round Valley NATRC Trail Ride in 2019 that Bill Shaffer (N6SG), Klaus Berkner (K6KHB), and I never saw a fire poppy in this area, let alone a more familiar poppy.

This leads me to our public service opportunities which for 2020 were cancelled, but there is some hope for 2021, especially in the latter part of year. As we would expect, right now it is a "waiting game" for the "powers that be" to make the decisions as to when these events can again be held. Even if the Covid-19 restrictions are lifted, there is still the question whether our served clients will

have enough time to organize events and of course, there is always those red-flag fire restrictions that have become increasing more frequent. So stay tuned, give a “shout out” on the MDARC@groups.io reflector for information, check the MDARC webpage, and of course, definitely consider volunteering when these events are “open for business.”

EchoLink®: This is something that I recommend every ham have in their “tool box,” especially if away from their usual QTH. I am sure that those who have already used it have found it to be a good method for getting on the air through the W6CX repeater. Below is the Echolink link (no, I’m not suttering!) to those who may wish more information. Be advised that signing up to use this service does require submitting a copy of your amateur radio license which is verified by those providing this service.

[Introducing EchoLink](#)

For those of you who have used it in the past, some changes have been made for use on W6CX. We plan to have more information on the MDARC website and this is a work in process, rather than me ad libing and “trying to get it right,” here is an excerpt from a recent email from Trevor (WA6JAU) to help you:

“Echolink now has a conference bridge that will connect to our node on Mount Diablo. The conference bridge has a capacity of 30 users at this time. The conference bridge is located on a file server service in Fremont that Pat Miller has an account for.

*You connect to the conference bridge by opening up Echolink on your computer, Cellphone, or IPAD and search for *W6CX-C*. If you are the first person to connect to the conference bridge it will automatically connect to Mount Diablo in 30 seconds and you can proceed with your QSO.*

*If you are not able to find *W6CX-C* with a search, then open the Conference Menu and look for the bridge.*

If all users disconnect from the Conference Bridge, it will disconnect from Mount Diablo in 1 minute to enable IRLP to work. IRLP is blocked whenever Echolink is active.”

RF Exposure Evaluation: You’ve probably already heard about the updated FCC Frequency Exposure Rules that became effective on May 3rd 2021. Below are some links that should help you to navigate through this:

This ARRL article outlines the new ruling and would expect ARRL will be providing additional information on their website.

[Updated Radio Frequency Exposure Rules Become Effective on May 3 \(arri.org\)](#)

This presentation by Greg Lapin, N9GL, who is the chairperson for the ARRL RF Safety Committee, is well worth watching. It does run for nearly 2 hours, but near the 22-minute mark there are some good calculation examples and informational tables.

<https://vimeo.com/user107547861/download/540342124/36ae948e83>

Here is a RF exposure calculator tool provided by Lake Washington Ham Club (Kirkland, WA).

<http://www.lakewashingtonhamclub.org/resources/rf-exposure-calculator/>

I contacted Dave Wickert, AE7TD, LWHC president about this tool and here is an excerpt from his reply to my question regarding the underlying parameters for this tool:

[Thanks Jim, K6JM, for suggesting I contact Dave]

"Click on the <more> button on the page and you will see information on the parameters. Also on the page we identify the source of the calculations and the BASIC code that was adapted to JavaScript – so it is easy to validate the tool if you wish. There is no "magic" – we are just assisting in the calculations. We are glad that your club is enjoying the calculator, we find it very useful too.

However, please note that this is a tool (part of) evaluating RF exposure. Like many things in ham radio, it requires skill and knowledge to apply the results to your individual situation. It does not replace the operator's requirement to evaluate their own situation; it simply assists in the process."

Scammed again and again!: Sorry if some of you received an email purportedly from me and asking you to "help out the Club" for a noteworthy charitable cause by purchasing gift cards, etc. At last count this will be the third scammer attempt and likely not the last. Like many clubs, MDARC provides the names and email addresses of Board members and committee chairs which makes for a tempting "mark" to trick unsuspecting recipients. Needless, to say, ignore these scam attempts.

Accepting donations: Please consider donating to the club.

- Donating to MDARC through Amazon Smile is a "painless" and at-no-cost-to-you way to donate. Use this link:

<https://smile.amazon.com/ch/23-7072059>

TIP: Be sure to bookmark the AmazonSmile website so it is conveniently available whenever you place orders with Amazon.

- Check out even more ways to donate from MDARC's webpage.



<http://www.mdarc.org/resources/donate-to-mdarc>

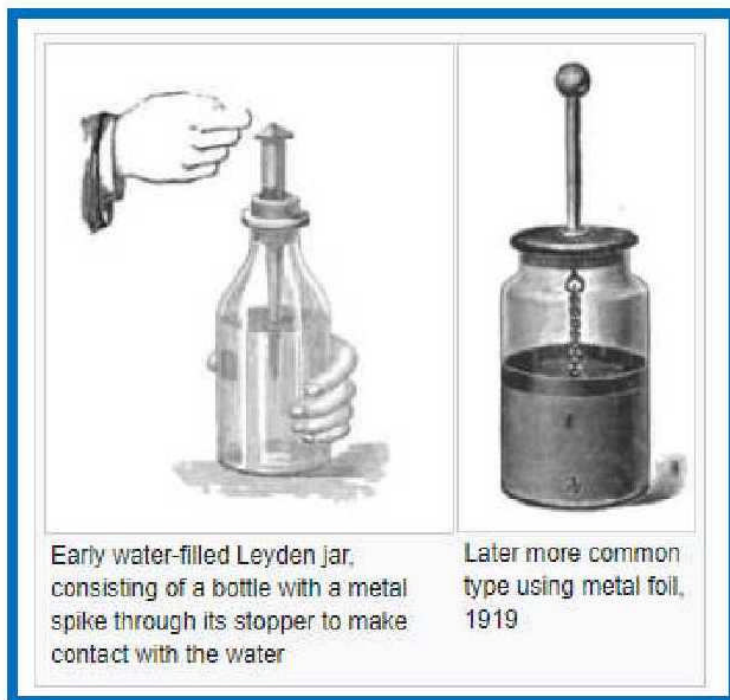
Club Meeting: Friday, 05/21/21. You can join on Zoom as early as 6:00 PM /to say “hello” and chat with others before our 7:00 PM official start. Remember that in order for you to directly receive the Zoom invitation, you need to have subscribed to the Club’s email reflector so if you are not on that reflector, then check out this link.

<http://www.mdarc.org/about-us/communicating-with-you>

Also, please check our guidelines for our Zoom meetings

<http://www.mdarc.org/about-us/zoom-guidelines>

The Leyden jar or Kleistian jar was a discovery made independently by German cleric **Ewald Georg von Kleist** on 11 October 1745 and by Dutch scientist **Pieter van Musschenbroek** of [Leiden](#) (Leyden) in 1745–1746.^[3] The invention was named after the city.



“The greatest motivational act one person can do for another is to listen.” Roy E. Moody

73,

Larry Bradley KK6QPE

05/08/21

Over the last month or two, a number of revisions have been made to the MDARC website:

* New pages:

- Peak Envelope Power. This page explains just what PEP is, in the context of the FCC's definition.
- Secondary Status of Amateur Radio Frequency Allocations: A number of the frequency bands allocated to amateur radio operators by the FCC are dedicated only to us. But we must share several other bands, or segments of bands, with other services. This page summarizes which bands and band segments are secondary, and to whom.
- FCC Monitoring Station Locations: The FCC's regulations require that "A station within 1600 meters (1 mile) of an FCC monitoring facility must protect that facility from harmful interference." But finding out just where those monitoring facilities are requires the ability to find your way around the U.S. Code of Federal Regulations. Not always an easy task. So we've done the work for you. (Spoiler alert: The closest one to us is in Livermore, a little north of I-580.)

* Page Revisions & Updates:

- Obtaining an FCC Registration Number (FRN) has been updated with the new requirements, which are effective May 20, 2021.
- Fundamental Basics for Amateur Radio Operators is a quick-reference page of stuff every ham should know, such as Ohms Laws for voltage & current and for power; frequency/wavelength conversion; the sine wave; major frequency bands and decibel shortcuts. On this page, the sine wave figure has been revised to include RMS.
- Calling Frequencies in the VHF / UHF / EHF Bands: A simplex calling frequency for the 3.3 GHz band was added, per a recent announcement from the ARRL.
- Decibels: A nifty shortcut note was added.
- Amateur Television (ATV): Several details were updated, such as an additional input frequency.
- Communicating With You: This page describes 13 ways the Club has to communicate with you, our Family, and for you to communicate among yourselves. The Groups.io email forum section was revised to list all nine (9) groups that we host, along with links to each.

And, of course, other pages had minor changes, such as fixing broken links and correcting misspellings.

If you have any questions about the website, find something that needs correcting, or have a suggestion for improvement, send a note to our Club email address, info@mdarc.org.

— Mike Patterson, N6JGA, Chair, Digital Media

Virtual Radio Tower Presentation by N6BT, Hosted by QCWA Chapter 228

The Quarter Century Wireless Association Chapter 228 invites all MDARC members to attend our **Saturday May 22, 2021 virtual meeting (10:30am)** via ZOOM that features a presentation on towers by Tom Schiller, N6BT. Tom is an internationally known ham and antenna maker who founded Force 12 Antennas many years ago. They are favored by DX'ers, contesters and even casual operators because they work extremely well and are sturdily constructed and have passed the test of time. This time, Tom focuses on what keeps the antenna up...**THE TOWER.** — *Ron Luttringer, K6XC, Chapter President*

Zoom link is below:

<https://zoom.us/j/586077332?pwd=WHVwbUNYTEFkSUhPVVdYYi9PSzBsUT09>



2021 CLUB AUCTION RESULTS

- * 100 items offered for sale
- * 91 items sold
- * 2 sellers, other than the Club
- * 21 buyers
- * Total amount sold was \$2,500
- * A little over \$2,300 earned for the Club

The items sold were personally delivered to the buyers by Jim Siemons, W6LK, Dick Wade, WM6G and Mike Warren, W6MEW within a few days after the auction. Feedback indicates that everyone involved were very pleased with the experience.

W6LK and W6MEW put in a considerable amount of work to conceive and execute the plan of how to do this, photograph all items for sale, create the on-line catalog, run the auction, load up their vehicles with all the gear and get it all delivered to all buyers scattered throughout the Bay Area in a timely manner. The Club owes them both a great deal of thanks for the outstanding success of our first ever online auction.

——— *Mike Patterson, N6JGA, Chair, Digital Media*

CLUB PRESIDENTIAL GAVELS RETURNED

By Mike Patterson, N6JGA

Recently our Technical Committee Chair, Jim Tittle, K6SOE, went to a ham garage sale put on by former club president Dave McIntyre, KG6ACD. While Jim was there, Dave gave Jim a small treasure trove of club historical items.

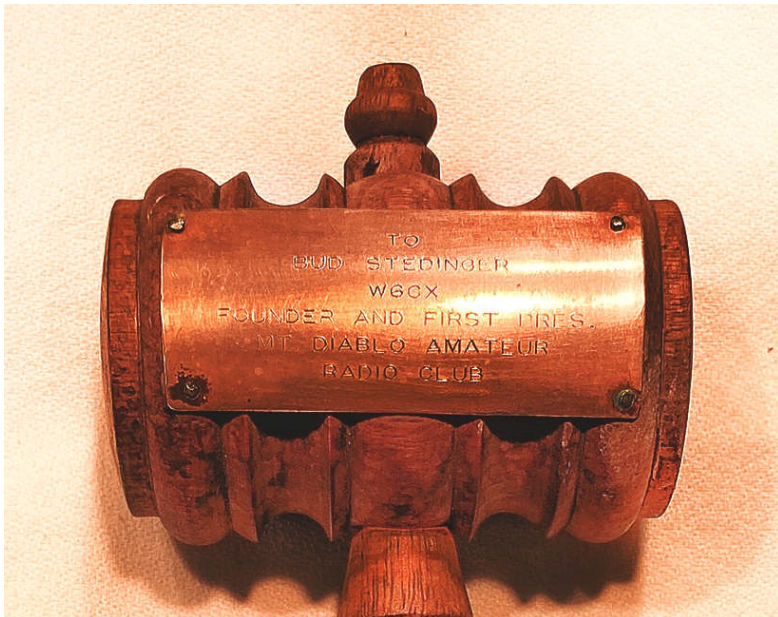
- * Our club's first Presidential gavel, engraved with the name of our Charter President, Bud Stedinger, W6CX.

- * Another, more recent, gavel, engraved with "President – Mt. Diablo Amateur Radio Club".

- * A complete copy of the 11th edition of the *ARRL Handbook*, copyright 1947, the year our club was founded. Just inside the front cover is a page of signatures dedicating the book to Bud, W6CX, and signed by numerous founding and charter members. Note: This edition of the *Handbook* is 512 pages and about 3/4" thick (not counting the hardback covers). Compare that to this year's 2021 6-volume set, which is 1,280 pages and several inches thick.

- * A Certificate of Affiliation, celebrating 50 years of club affiliation with the ARRL, beginning July 13, 1948.

These items will be added to the club's history collection. I want to give my sincere thanks to Dave, KG6ACD and Jim, K6SOE, for their efforts to preserve these items. A special thank you to Pete Harris, KE6ZIW, for once again donating his extraordinary skills to take such excellent photos of the gavels.



CLUB BOARD OF DIRECTORS MEETING MINUTES APRIL 5, 2021

Held at Zoom online

1. Call to Order: The meeting was called to order at 7:00 pm by Larry Bradley KK6QPE after it was determined that there was a quorum for conducting Club business.

2. Roll Call: Attendees via Zoom screen shot: Larry Bradley KK6QPE, President; Jan Kulisek KM6NFC, Vice President; Brian Lotter KM6NGS, Secretary; Cathi Walton K2CJW, Treasurer; Ron Bunch W4FEK, Emergency Coordinator; Mike Warren W6MEW, Director at Large; Trevor Hall WA6JAU, Director at Large; Mike Patterson N6JGA, Director at Large; Eric Ferguson KA6USJ, Director at Large; Dick Wade WM6G; Larry Loomer KI6LNB; Bruce Alcorn KK6SQM; Dave Billeci WA6UHA; Mary Solon KD6MKS; Greg Estep KE6VTA; Dave Piersall N6ORB; Lucas Katz.

3. Approval of Minutes from Last Meeting: The minutes of the March 1, 2021 meeting were approved without objection.

4. Adopt Tonight's Agenda: The agenda for this meeting was approved.

5. Officer reports:

a. President Larry Bradley KK6QPE reported that he is back in Concord.

b. Vice-President Jan KM6NFC reported that the upcoming speakers for the General Meetings are as follows:

May 21, John Trinrud K9ONR: A "Private" Winlink Network for Walnut Creek CERT

June 18, Jim Moen K6JM: DMR and D-Star.

By next month, he plans to finalize the presentations for the rest of the year

c. Secretary Brian KM6NGS – No report except that we need to note that the minutes that were approved in item 3 above, were version 2, which contains the specific wording required by Cathi K2CJW for the Bank.

d. Treasurer Cathi K2CJW submitted a summary of the March 2021 monthly report and noted that the income is higher than expenses due to a higher than usual number of renewals for this time period. Mike Patterson N6JGA wanted to know the origin of the income and expenses in the Pacificon account. Cathi explained that all PayPal income to MDARC comes via the Pacificon account. The March 2021 checking account details were then discussed. There were no questions for Cathi. Concerning Taxes, Cathi reported that the California state fee of \$10 has been waived for 2020, probably due to the Covid response. The DOJ registry fee is reduced from \$50 to \$25 due to the reduction in income. The total for this year is \$25 compared to the usual \$60.

6. Emergency Coordinator Report: Ron Bunch W4FEK reported that things are moving along normally. There were no questions for Ron.

7. Directors at large reports: Mike W6MEW – no report Trevor Hall WA6JAU – no report. Eric Ferguson KA6USJ – no report. Cal Vasquez K6VT – not present.

8. Committee Reports:

a. Education and Training; John Primus AF6RJ submitted a report before the meeting and Larry KK6QPE sent it out via email.

b. Pacificon; Julie WJ8MAH was not present but Mike N6JGA reported that the committee meeting is a week from this Wednesday and that they are proceeding as if it's a go. He has had discussions with the Hotel about possible contingencies.

c. Digital Media; Mike Patterson N6JGA reported that we have a new email address, hamradio-class@mdarc.org that the training committee is using for their correspondence. Larry KK6QPE asked if the address is only for correspondence or for registration as well. Dick WM6G explained that it replaces the Gmail address hamradioclass@gmail.com that Richard Lueck K6REL has been using for registration and that any questions to a specific person rather than to the registration process, would come to the info@mdarc.org address. Larry KK6QPE thanked Dick for taking on that position.

d. Outreach; Dick Wade WM6G reported that the pace is steady at a couple of calls and emails per week and that he thinks that we are doing a good job.

f. Technical; Jim Siemons W6LK was not present but has sent out a report from the Technical committee. Larry asked Trevor WA6JAU if DMR is going to replace D-Star. Trevor explained that the repeater will have both modalities but that they will not operate simultaneously. The repeater will switch modality depending upon what modality a user is using, based on a first come first served basis, and that the repeater will hold that modality for approximately 20 seconds before becoming available to switch modality for another user. This will create some confusion because D-Star radios will not be able to “hear” DMR transmissions and vice versa, so users will need to watch their S meter and channel busy light to see if the repeater is busy.

g. Auction; Mike N6JGA, reported that all Auction information is on the MDARC website except for the list of items that will be going up for bid and that Jim W6LK will produce a .pdf document that he will post on the web so that it can be downloaded.

h. Vehicle (MDARC-1); No report.

i. Communications Trailer; Mike Warren W6MEW had nothing to report.

j. Field Day; Larry KI6LNB stated that there is nothing to report except that Contra Costa is in the red tier now moving toward orange.

k. License Testing; Larry KI6LNB reported that we did do testing and GOTA classes for the current Technician license class.

l. Public Service; There was no report.

m. Membership; Jan KM6NFC reported that, as of April 5 there were 8 new members, 22 renewals and one cancelled membership with a total of 377 primary and individual members. The portal will be able to show details of family members in the future. Larry KK6QPE asked how many members have not renewed yet. Jan replied that 173 have not renewed yet and that he will send another reminder. Mike N6JGA asked what is being done to prepare the 2021 Membership Directory which is usually published in April. He stated that this is normally done by Jim Brunk N6BHX based on membership data. Jan stated that he will contact Jim Brunk.

n. Election Committee; no report

o. Scholarship; Janice KG6VTD had nothing to report.

p. Radio Lending Library; No report.

Special guest and presentation:

Mike W6MEW introduced Lucas Katz who made a presentation of his work on “Underwater Wireless Transmission of Data and Energy Using Artificial Light for Unmanned Underwater Vehicles and Floats”. Lucas is the winner of the MDARC special award at the 2021 Contra Costa County Science and Engineering fair.

9. Unfinished Business:

9.1 Review of Board and Club Meeting schedules; The next meeting will be the General Membership meeting scheduled for April 16 when we will be having our Auction. The next Board Meeting will be on May 3rd.

9.2 Provident account signer changes. Cathi K2CJW reported that Jan has an appointment with the Bank on this coming Saturday so we are “on our way”.

9.3 Technical Committee report regarding South Peak to North peak repeater transfer. There was no discussion on this issue.

9.4 Discussion of Auction: date, time, duration, logistics, catalog. We will send out an announcement on groups.io to point members to the website for detailed Auction information.

9.5 Updating MDARC By-Laws for grammatical and content considerations. Larry KK6QPE reported that he will begin to work on this soon.

9.6 Status report on revising Membership database for processing and tracking payments, status, etc. Jan KM6NFC showed a report and stated that it is running on a sub domain of his business name and only he has access to it. Next month he would like to invite some Board Members to evaluate it. The next step is to allow user registration which will be open to Board Members only with access to CRUD (Create Read Update Delete) for family members. Larry KK6QPE asked Jan to create a flow chart so that the Board Members can see where we are in the process.

(continued on following page)

9.7 Status on creating a members' web portal. This was discussed in 9.6 above. There were no further questions for Jan.

10. New Business:

10.1 Discuss criteria for returning to in-person Board and General Membership Meetings. Larry KK6QPE opened up a discussion to establish the Board's criteria for in-person meetings. The conclusion was that we will adhere to the county health department's directives. There was further discussion about in person meetings so it was decided that the membership should be polled with the question, "If the county allows us to meet in person, would you still prefer to meet in Zoom?" There was also discussion about possibly having a hybrid of zoom and in-person meetings with the method being left for a later discussion.

11. Adjournment

Mike W6MEW, seconded by Cal K6VT, proposed a motion to adjourn. All members voted in favor. Meeting Adjourned at 8:35 pm

Respectfully submitted by

Brian Lotter KM6NGS

Secretary, on April 18, 2021

These meeting minutes were signed digitally due to the digital meeting.

Club Member Christopher M. Brown, N6CMB, Passed Away on April 14, 2021



(photo from www.linkedin.com)

We mourn the loss of one of the founders of CoCo Fusion, Chris Brown, who was also a member of the Mount Diablo Amateur Radio Club.

The N6CMB fusion repeater was the third repeater to become active on the Contra Costa Fusion Network.

Chris will be missed throughout the amateur community.

Please join me in prayer for strength for Chris's family and friends.

--- Tim Barrett, K6BIV

(Source: <https://contracostafusion.network/chris-brown-n6cmb-sk/>)

Chris, a Rhode Island native, was a 1992 graduate of the United States Merchant Marine Academy and was employed by Chevron Shipping Company in San Ramon as manager of regulatory affairs.

Link to full obituary:

<http://silentkeyhq.com/main.php?p=bin/NSKALookup.php&dlmk=&call=N6CMB&uid=1061618688397743>

STATEMENT FROM HAM RADIO OUTLET REGARDING THE CLOSURE OF THEIR OAKLAND STORE AND THE OPENING OF THEIR NEW SACRAMENTO STORE

Ham Radio Outlet's dedication to providing the absolute best pricing and service to our customers resulted in a difficult decision to move from Oakland to Sacramento.

Oakland has been HRO's home for many years and every effort was made to remain in Oakland. Several factors lead to this decision: a dramatic three times (3X) increase in rent, deteriorating condition of the building and surrounding area, the desire to not increase radio/equipment pricing to offset increased costs, and the inability to find another suitable/affordable location in Oakland forced us to move.

Opening late June 2021, HRO Sacramento will offer the amateur radio community of Northern California many **improvements**. With easy access from Interstate 80 and ample parking we can assure our customers the drive to Sacramento from the Bay Area will be worth it for those who wish to visit. **Located at 4813 Auburn Blvd** our new location will feature a large retail area, rows of equipment and gear, walls filled with antennas and supplies, friendly staff, and an improved equipment "demo" bench. A much larger warehouse will allow us to stock more inventory. A benefit that will help us to pick and ship with "1 day shipping" to most all of the surrounding area.

The entire HRO family of employees looks forward to the opening of our newest store and to continue to provide great sales and service in the area for many years to come.

*Sincerely,
Richard Visokey, AD7C
Director of Operations
Ham Radio Outlet
May 12, 2021*



52nd ANNIVERSARY CAMPOUT PARTY 2021

PRESENTED BY THE KNIGHTS OF THE MEGAHERTZ

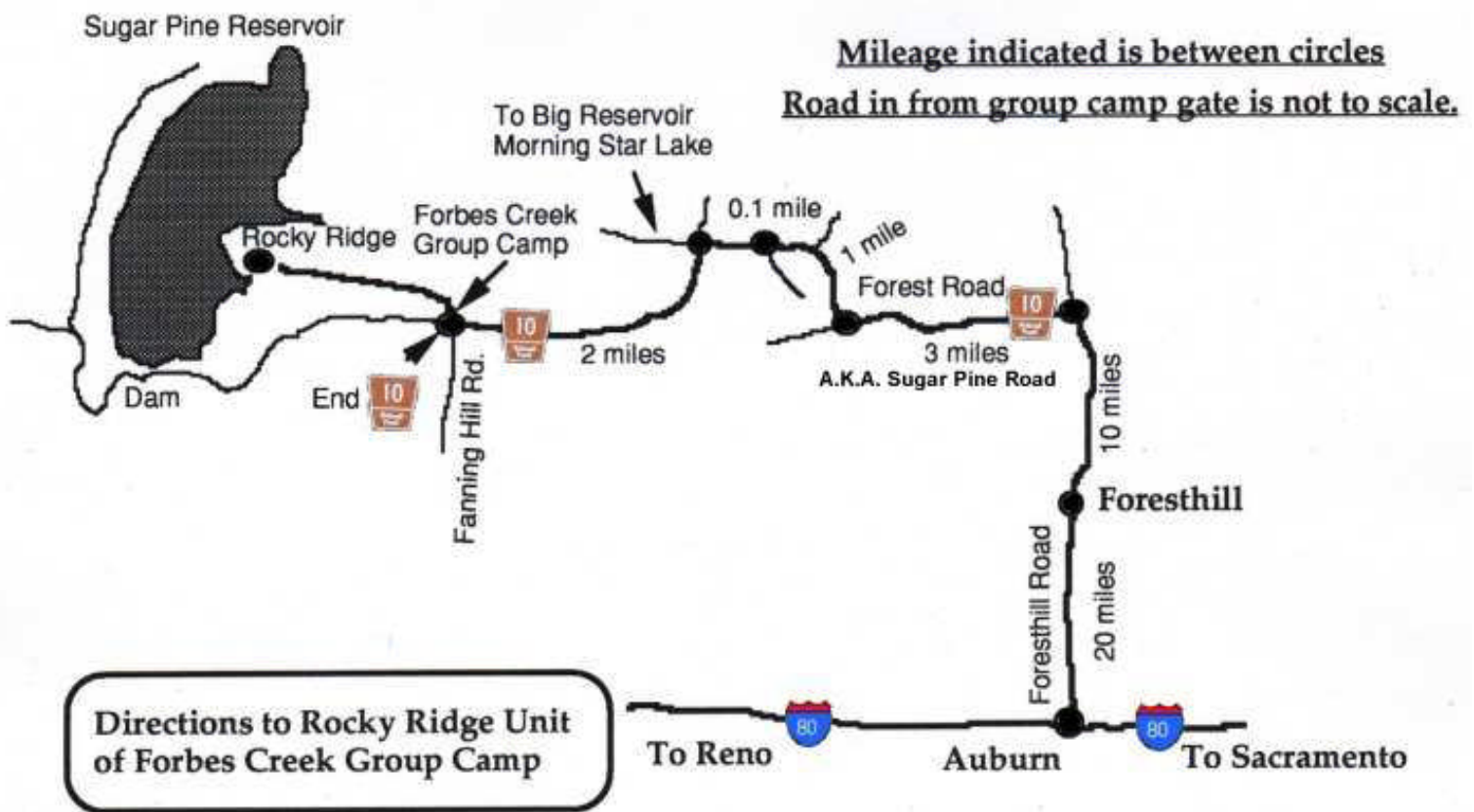
" A 2021 Camping Adventure" June 11, 12 and 13, 2021

This campout will take place starting on Friday, June 11 and ends on Sunday, June 13 at the Sugar Pine Dam Recreation Area in the Forbes Creek section at the Rocky Ridge group site. It is one of the most beautiful spots in Placer County. We are limited to 50 people at this site so get your reservations in early.

Cost is \$40 per family.

For more information please visit : <http://www.knightsmhzt.org/camp2018.htm>
(yes, it reads 2018 but it has the 2021 information)

Or contact Dave, WA6UHA, at: youha@comcast.net



Zoom Video Meeting Instructions

Note: Zoom videoconference meeting access IDs and passwords will be distributed only through our [MDARC Groups.io email reflector](#). They will not be posted on the club web site or other publicly available forums, in order to maintain needed security precautions.

General Information:

All meeting hosts and attendees are expected to review these guidelines prior to any Club meeting and abide by them throughout the meeting.

Zoom has two kinds of events: Meetings and Webinars.

Meetings:

In Meetings, everyone can see and hear everyone else (unless an individual has been muted or stopped their video). Everyone can also share their screen (unless blocked by the host), for demonstrating something or showing a PowerPoint, as examples.

Webinars:

In Webinars, only the presenter(s) can be seen and heard. Questions and comments are normally handled by either submitting the question by typing it into the Question pop-up box or the Chat area; or using the “Raised Hand” icon, then asking your question when the host unmutes and acknowledges you.

Webinars are an extra-cost feature in Zoom, so all Club events will be Meetings. This means every participant must be diligent about abiding by these guidelines, to minimize disruptions.

Per our Bylaws, Article III, Section 5; Electronic Meetings; Item 6:

(<http://www.mdarc.org/about-us/official-documents/bylaws>)

“Electronic Meetings may be conducted at the discretion of the meeting’s chair. Nothing in this Section shall be construed as to require that any meeting of the Membership, Board of Directors or any committee be provided with the facilities for an Electronic Meeting, or that any attendee has the right to attend any meeting by electronic means.”

If you have any questions about using Zoom, please let us know at info@mdarc.org or by calling 925-288-1730.

Go to https://zoom.us/download#client_4meeting

For computers (Windows or Apple), download the “Zoom Client for Meetings”.

For phones and tablets, scroll down and download the appropriate “Zoom Mobile App”

* We recommend using a computer, rather than a phone or tablet, when possible. The screen is larger, the audio is usually better and the controls are easier to use.

Once the app is installed, you can join a test meeting to test your system and your audio.

See <http://www.mdarc.org/about-us/zoom-guidelines/zoom-how-to>

(continued on following page)

Zoom Video Meeting Instructions (continued)

- * Be sure to review the “Attendee Controls in a Meeting” on Zoom’s web site. See our [Zoom How-To page](#) for the link.
- * Please attend via a video connection whenever possible. Although calling into a meeting by audio-only is allowed, it’s strongly discouraged. Attendees are at a substantial disadvantage when they can’t see the material being displayed on-screen. If you don’t have or don’t want to use a camera yourself, it’s possible to attend a video meeting while keeping your video image turned off. That way, you can at least see the material. This may somewhat restrict your ability to participate, however.
- * If you aren’t fully familiar with using Zoom, please see our [Zoom How-To page](#).
- * Once in a meeting, check your name as it appears at the bottom of your image, or in the Participants List. Change it to one appropriate for the meeting, if needed. We suggest adding your call sign, for example. You can also make your name change permanent in your online profile. See our [Zoom How-To page](#) for instructions.

Video:

- * Test your camera before the meeting.

Make sure you have the correct camera selected in your PC’s settings and that it’s working.

- * Use appropriate lighting (no bright windows or lights behind you; light your face well, etc.)

- * Do not use a camera angle that’s too low (e.g., many laptops on a table or desk).

No one wants to stare up your nostrils the entire time.

- * Check your own image. Is this how you want to be seen? Is your face clear and well lighted?

- * Wear appropriate clothes (please no pajamas, bath towels, etc.).

- * Check the background of your image for anything you may not want others to see (junk in the corner, unmade beds, very personal items, etc.).

- * Do not use a Zoom virtual background unless your PC can handle it.

Get a green screen if you really want a virtual background.

Turning on Zoom’s virtual background feature without a green screen often messes with your image and distracts from the meeting.

- * Remember that, in Meetings, everyone can see you at all times.

Temporarily stop your video if you must do anything you don’t want everyone to see.

Audio:

- * Test your audio before the meeting.

Make sure you have the correct microphone & speakers selected in your PC settings and that they’re working.

Does your microphone sound good? Are you easily understood? If not, consider an external microphone.

- * Keep your mic muted unless you’re speaking.

- * Understand that if your audio is very poor, or if there are background noises, side conversations, etc.; the host may mute you.

* Remember, you must click “Join with internet audio” to get into the meeting. You will be placed in the “Waiting Room” until the host admits you. Your audio, both your speakers and your mic, will be muted until the host admits you. Once in the meeting, your mic will remain muted until unmuted by you or the host. Unfortunately, this is a necessary security measure.



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NEW

FTDX101MP | 200W HF/50MHz Transceiver

- Hybrid SDR Configuration • Unparalleled 70 dB Max. Attenuation VC-Tune • New Generation Scope Display 3DSS • ABI (Active Band Indicator) & MPVD (Multi-Purpose VFO Outer Dial) • PC Remote Control Software to Expand the Operating Range • Includes External Power With Matching Front Speaker



NEW

FTDX10 | HF/50MHz 100 W SDR Transceiver

- Narrow Band and Direct Sampling SDR • Down Conversion, 9MHz IF Roofing Filters Produce Excellent Shape Factor • 5" Full-Color Touch Panel w/3D Spectrum Stream • High Speed Auto Antenna Tuner • Microphone Amplifier w/3-Stage Parametric Equalizer • Remote Operation w/optional LAN Unit (SCU-LAN10) • *This device has not been approved by the FCC.*



FT-991A | HF/VHF/UHF All Mode Transceiver

Real-time Spectrum Scope with Automatic Scope Control • Multi-color waterfall display • State of the art 32-bit Digital Signal Processing System • 3kHz Roofing Filter for enhanced performance • 3.5 Inch Full Color TFT USB Capable • Internal Automatic Antenna Tuner • High Accuracy TCXO



NEW

FTDX101D | HF + 6M Transceiver

- Narrow Band SDR & Direct Sampling SDR • Crystal Roofing Filters Phenomenal Multi-Signal Receiving Characteristics • Unparalleled - 70dB Maximum Attenuation VC-Tune • 15 Separate (HAM 10 + GEN 5) Powerful Band Pass Filters • New Generation Scope Displays 3-Dimensional Spectrum Stream



FT-891 | HF+50 MHz All Mode Mobile Transceiver

Rugged Construction in an Ultra Compact Body • Stable 100 Watt Output with Efficient Dual Internal Fans • 32-Bit IF DSP Provides Effective and Optimized QRM Rejection • Large Dot Matrix LCD Display with Quick Spectrum Scope • USB Port Allows Connection to a PC with a Single Cable • CAT Control, PTT/RTTY Control



NEW

FTM-300DR | C4FM/FM 144/430MHz Dual Band

- 50W Reliable Output Power • Real Dual Band Operation (V+, U+, V+U, U+V) • 2-inch High-Res Full Color TFT Display • Band Scope • Built-in Bluetooth • WiRES-X Portable Digital Node/Fixed Node with HRI-200



FT-2980R | Heavy-Duty 80W 2M FM Transceiver

- Massive heatsink guarantees 80 watts of solid RF power • Loud 3 watts of audio output for noisy environments • Large 6 digit backlit LCD display for excellent visibility • 200 memory channels for serious users



FTM-7250DR | C4FM/FM 144/430MHz Dual Band

- 50 Watt Mobile • System Fusion-II Compatible • Operates Advanced C4FM Digital & Conventional FM Modes • 3 Watt Powerful & Clear Audio with Front Speaker



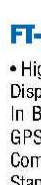
FTM-400XD | 2M/440 Mobile

- Color display-green, blue, orange, purple, gray • GPS/APRS • Packet 1200/9600 bd ready • Spectrum scope • Bluetooth • MicroSD slot • 500 memory per band



FT-70DR C4FM/FM 144/430MHz Xcvr

- System Fusion Compatible • Large Front Speaker delivers 700 mW of Loud Audio Output • Automatic Mode Select detects C4FM or Fm Analog and Switches Accordingly • Huge 1,105 Channel Memory Capacity • External DC Jack for DC Supply and Battery Charging



FT-3DR C4FM/FM 144/430 MHz Xcvr

- High Res Full-Color Touch Screen TFT LCD Display • Easy Hands Free Operation w/Built In Bluetooth Unit • Built-In High Precision GPS Antenna • 1200/9600bps APRS Data Communications • Simultaneous C4FM/C4FM Standby • Micro SD Card Slot



FT-65R | 144/430 MHz Transceiver

Compact Commercial Grade Rugged Design • Large Front Speaker Delivers 1W of Powerful Clear Audio • 5 Watts of Reliable RF Power Within a compact Body • 3.5-Hour Rapid Charger Included • Large White LED Flash-light, Alarm and Quick Home Channel Access



FT-60R | 2M/440 5W HT

- Wide receiver coverage • AM air band receive • 1000 memory channels w/alpha labels • Huge LCD display • Rugged die-cast, water resistant case • NOAA severe weather alert with alert scan



- RETAIL LOCATIONS** – Store hours 10:00AM - 5:30PM - Closed Sunday
- PHONE** – Toll-free phone hours 9:30AM - 5:30PM
- ONLINE** – WWW.HAMRADIO.COM
- FAX** – All store locations
- MAIL** – All store locations

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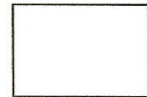
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The Carrier

Newsletter of the Mt. Diablo Amateur Radio Club
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www.mdarc.org



FIRST CLASS

<https://www.facebook.com/mdarc.org>

W6CX Nets

M-F 5:42 am Morning Muster 147.060+ 224.780- 441.325+

M-F 6:10am Commuter Net 147.060+ 224.780- 441.325+

Monday 8:00 pm SATERN Net 147.060+

Tuesday 7:30 pm Fat City 10 meter USB/CW Net 28.420 MHz

Tuesday 8:00pm Digital Practice Net 147.060+ 224.78- 441.325+

Wednesday 7:00 pm SKYWARN Net 147.060+

Thursday 7:30 pm MDARC Club Net 147.060+

Thursday 8:00 pm Digital Amateur Television Net 147.060+

Club FM Repeaters

147.060 MHz + / PL 100Hz

224.780 MHz - / PL 77Hz 441.325 MHz + / PL 100Hz

EchoLink: W6CX-R /133896, IRLP: 3057

<https://www.broadcastify.com/listen/feed/25334>

D-STAR 145.000 offset plus 2.5 MHz

<https://w6cx.dstargateway.org/>

DATV Internet Stream: <http://w6cxatv.mdarc.org/>

YouTube Channel: Media MDARC

Contra Costa County Emergency Communications Nets Every Thursday

6:35 pm HF Countywide 3.893 MHz LSB

6:45 pm West County 145.110-- (82.5 PL)

7:00 pm Central County 145.680 Simplex

7:00 pm East County 146.535 Simplex

7:00 pm South County 147.480 Simplex

7:20 pm Countywide 145.490-- (107.2 PL)

or 147.735-- (107.2 PL)

or 145.410-- (107.2 PL)

Concord Auxiliary Radio Emergency Service (CARES)

Wednesday 8:00pm 147.405 Simplex

Digital Amateur Television Repeater

Digital ATV Output: 1244.500

Digital ATV Inputs: 1292.500, 1273.0, 917.0, 430.0

Analog ATV Input: 1270.000 FM (PL 192.8)

May and June 2021 Club Calendar

Friday May 21, 2021 6:00pm - Virtual Club Meeting - Watch on DATV Repeater or join via zoom.us

Saturday June 5, 2021 8:00am - MDARC Technical Committee Meeting - VIA VIDEO CONFERENCE

Monday June 7, 2021 7:00pm - MDARC Board of Directors Meeting - VIA VIDEO CONFERENCE

Friday June 18, 2021 6:00pm - Virtual Club Meeting - Watch on DATV Repeater or join via zoom.us